

**IN THE UNITED STATES PATENT OFFICE**

Applicants: Martin Williamson  
David O'Grady

Application Ser. No.: 10/591,188

Filed: September 19, 2008

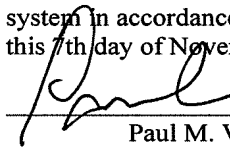
Title: LIQUID ELECTROLYTE GAS  
SENSOR COMPRISING RIGID  
POROUS ELECTRODE  
SUPPORT

Group Art Unit No. 1795

) Confirmation No. 7364  
)  
) Atty. Docket No.:  
) 9930/98019 (H27363 US)  
)

**CERTIFICATE OF TRANSMISSION**

I hereby certify that this paper is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) on this 7th day of November, 2008.



Paul M. Vargo

**REQUEST FOR CORRECTED FILING RECEIPT**

**VIA EFS-WEB**

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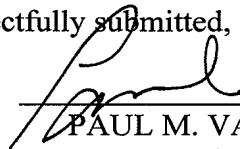
Sir:

Attached hereto is a *corrected* copy of the filing receipt for the above-identified application that shows the correct spelling of Assignee. On the Filing Receipt under the section heading, **Assignment For Published Patent Application**, Assignee is incorrectly shown to be *ELLWEGER* ANALYTICS AG, Uster, SWITZERLAND. On the attached front page of the corresponding International application, namely PCT/GB2005/000765, Applicant is shown to be *ZELLWEGER* ANALYTICS AG. Please issue a corrected filing receipt that reflects the correct spelling of ZELLWEGER ANALYTICS AG.

Respectfully submitted,

Dated: November 7, 2008

By



PAUL M. VARGO

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
10/591,188	09/19/2008	1795	1030	9930/98019 (H27363 US)	18	2

CONFIRMATION NO. 7364

FILING RECEIPT



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128  
HONEYWELL INTERNATIONAL INC.  
101 COLUMBIA ROAD  
P O BOX 2245  
MORRISTOWN, NJ 07962-2245

Date Mailed: 09/26/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Martin Williamson, Dorset, ENG, UNITED KINGDOM;  
David O'Grady, Co. Sligo, IRELAND;

Assignment For Published Patent Application

~~ELLWEGGER~~ ELLWEGGER ANALYTICS AG, Uster, SWITZERLAND

Power of Attorney: The patent practitioners associated with Customer Number 128

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/GB2005/000765 03/01/2005

Foreign Applications

EUROPEAN PATENT OFFICE (EPO) 04251228.5 03/03/2004

If Required, Foreign Filing License Granted: 09/23/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 10/591,188**

Projected Publication Date: 01/08/2009

Non-Publication Request: No

Early Publication Request: No

**Title**

Liquid Electrolyte Gas Sensor Comprising Rigid Porous Electrode Support

**Preliminary Class**

204

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**Title 35, United States Code, Section 184**

**Title 37, Code of Federal Regulations, 5.11 & 5.15**

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(74) Agents: HEDLEY, Nicholas, James, Matthew et al.; Kil-  
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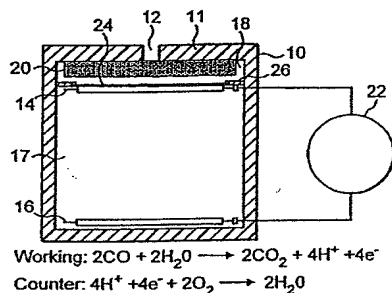
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(72) Inventors; and

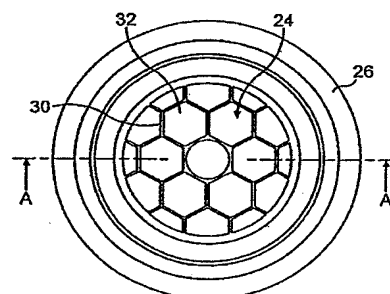
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[Continued on next page]

(54) Title: LIQUID ELECTROLYTE GAS SENSOR COMPRISING RIGID POROUS ELECTRODE SUPPORT



1



2

(57) Abstract: An electrochemical gas sensor is disclosed comprising: a working electrode (14) comprising a gas porous membrane and a catalyst layer formed on one side of the membrane; a counter electrode (16) comprising a catalyst; electrolyte (17) in contact with the catalyst both of the working electrode and of the counter electrode; and a support (24) that is in contact with, and presses down on, the side of the working electrode remote from the electrolyte and that compresses the electrodes and the electrolyte together. The support has a thickness of not greater than 0.5mm and includes open areas allowing gas to contact the membrane. The bars (30) between the open areas (32) of the support constitute less than 40%, of the support, including the open areas. The support allows for a greater response speed and provides greater efficiency of catalyst usage. By making the support bars thin, the amount of electrode catalyst occluded by the support is reduced.

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